UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/616,486	07/08/2003	Jesse T. Quatse	129510.01101	9731

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EXAMINER
LASTRA, DANIEL

ART UNIT	PAPER NUMBER
3622	

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>07 September 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>7-27</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>7-27</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 7-27 have been examined. Application 10/616,486 HIGH-PRECISION

CUSTOMER-BASED TARGETING BY INDIVIDUAL USAGE STATISTICS was filed

07/08/2003.

Response to Amendment

2.   In response to Non Final Rejection filed 06/21/2006, the Applicant filed an

Amendment on 09/07/2006, which amended claims 10 and 20.

Claim Rejections - 35 USC § 112

3.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Claim 20 recites "promotional offers for a particular product

that may be distributed in the aggregate to all customers". For purpose of art rejection

said limitation would be interpreted as meaning as distributing promotional offers to

customers.

Claim 20 recites the limitation "in the aggregate to all customers" in paragraph 5.

There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 7-12, 18 and 20-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Sridhar et al (US 2003/0208754).

As per claim 23, Sridhar teaches:

In an electronic system for distributing promotional offers, a method of targeting a plurality of customers from a customer database for distribution of limited quantities of promotional offers from a plurality of promotional offers in accordance with one or more constraints on the quantity of promotional offers to be distributed and/or on the selection of the customers to whom promotional offers are to be distributed, the method, comprising:

generating a plurality of scores for said plurality of customers, each said score being associated with one said customer and with one said offer, and each said score measuring a probability that the associated customer will make a purchase in accordance with the associated offer (see paragraph 116 "purchase prediction: The probability that a subscriber will purchase a particular product in a particular week is referred a purchase prediction" i.e. customer-offer score);

identifying the highest score in said plurality of scores and identifying the customers substantially scoring said highest score (see paragraph 169 "select the ad of

the product with largest purchase prediction for this subscriber from the products associated with the selected event");

targeting customers of said plurality with personalized offer lists, wherein each said identified customer's personalized offer list is generated in said electronic system by assigning to the personalized list for each said identified customer the offers associated with said highest score which satisfy said one or more constraints (see paragraph 175 "sponsor impose a restriction on number of such offers") and successively repeating said identifying and assigning steps for the next highest successive score (see paragraph 106, 156 169-170, "select product with next largest purchase prediction from product list of the current event and repeat step 19 to 27 until all products in the list are covered" see paragraph 191). Sridhar objective is to draw a customer's attention to a product which has the largest purchase prediction for said customer (see paragraph 156) and selects an ad from a set of ads pre-selected for said customer (see paragraph 106) where said ads are delivered to said customer in a sequence (i.e. from highest to lowest purchase prediction probability) from the products associated with a selected event (see paragraph 169-170) and where sponsors of said ads impose a restriction or constraint on the number of such offers (see paragraph 175). Therefore, Sridhar teaches a customer-based system as defined by Applicant's specification in page 7, lines 10-15 where products' offers are selected for each customer and where said offers are presented to said customer in a sequence based upon said offers' purchase prediction or score (i.e. probability that an offer would be accepted by a customer), similar to the Applicant's claimed invention.

As per claim 24, <u>Sridhar</u> teaches:

The method of claim 23, wherein said promotional offers relate to a plurality of products organized in taxonomic groupings, and the method further comprises:

basing the scores associated with one or more of said offers on the grouping probability that a customer will purchase any product in a given taxonomic grouping (see paragraph 133).

As per claim 25, <u>Sridhar</u> teaches:

The method of claim 24 wherein a score is based on said grouping probability and the offer associated with said score is for a product included in said given taxonomic grouping (see paragraph 133).

As per claim 26, <u>Sridhar</u> teaches:

The method of claim 24 wherein a score is based on said grouping probability and the offer associated with said score is for a product not included in said given taxonomic grouping (see figure 4C).

As per claim 27, <u>Sridhar</u> teaches:

The method of claim 23 wherein said one or more constraints include a limit on the number of offers delivered to any individual customer and said method further comprises: performing said assigning step for each said identified customer only a number of times equal to said limit (see paragraph 68).

As per claim 7, <u>Sridhar</u> teaches:

The method of claim 23, wherein said promotional offers relate to a plurality of products organized in taxonomic product grouping, and the method further comprises:

providing a product grouping probability profile associating with each said product grouping a measure of the probability that a customer will purchase a product from said product grouping (see paragraphs 213-229); and

deriving said score for each said combination of customer and promotional offer from the measure of probability associated with each product grouping containing a product subject to the promotional offer (see paragraphs 175-201).

As per claim 8, <u>Sridhar</u> teaches:

The method of claim 7, further comprising:

providing access to a transaction history database for at least a substantial portion of said plurality of customers, wherein the database associates with each customer of said substantial portion an identification of transactions engaged in by the customer and an identification of products previously purchased by the customer in each of the transactions (see paragraphs 71 and 134);

providing a transaction summary data structure associating with each said customer the total number of transactions the customer has engaged in and the numbers of transactions including each said product grouping (see paragraphs 140-159);

averaging the product groupings per transaction from said transaction summary data structure for at least a portion of said customers (see paragraphs 140-159); and

deriving said measure of probability associated with each said product grouping from the averaged product groupings per transaction for the associated product grouping (see paragraphs 140-159).

As per claim 9, <u>Sridhar</u> teaches:

The method of claim 7, further comprising:

normalizing said product grouping probability profile for an individual customer to reflect a relative probability of said individual customer purchasing from a product grouping with respect to an average probability for a customer to purchase from said product grouping (see paragraphs 70, 140-160).

As per claim 10, <u>Sridhar</u> teaches:

The method of claim 7, further comprising:

applying preprogrammed targeting criteria embodying a marketing strategy to said product grouping probability profile to provide a profile of offer scores (see paragraph 160)

As per claim 11, <u>Sridhar</u> teaches:

The method of claim 10, wherein

said marketing strategy includes at least one targeting product grouping and a promoted product grouping linked to said at least one targeting product grouping; and said promotional offers are distributed only to customers having a high probability of acceptance for said at least one targeting product grouping (see paragraphs 175-178).

As per claim 12, <u>Sridhar</u> teaches:

The method of claim 11, further comprising: providing a taxonomy of said product groupings; wherein said at least one targeting product grouping is defined in reference to said taxonomy (see paragraph 70, 133, figure 4C).

As per claim 18, <u>Sridhar</u> teaches:

In an electronic system for distributing promotional offers, a method of adjusting the distribution of limited quantities of promotional offers from a plurality of promotional offers to a plurality of customers comprising:

providing, for each combination of customer and promotional offer from said pluralities, a measure of the acceptance probability that the customer will accept the promotional offer (see paragraphs 175-201),

presenting the measures of acceptance probabilities for an individual customer in a graphical display on said electronic system (see figures 1A, 7; 4D2; paragraphs 136-149),

wherein said graphical display includes a plurality of graphic elements, one said graphic element being associated with each said measure of acceptance probability provided for said individual customer at least for the highest ranking of said measures (see paragraph 116; 136-149; figures 1A, 7);

enabling adjustment of said measures of acceptance probability by movement of the associated graphic elements; and selecting a limited quantity of offers from said plurality of offers for distribution to said individual customer, wherein said limited quantity of offers are selected substantially in descending order of said measures of acceptance probabilities as adjusted in said enabling step (see paragraphs 164-201; see figure 7; 136-149).

As per claim 20, <u>Sridhar</u> teaches:

A method of distributing limited quantities of promotional offers to a plurality of customers utilizing a transaction history database comprising an identification of

transactions engaged in and an identification of products previously purchased by one or more customers, said method comprising:

deriving a historical purchase probability profile from said transaction history database for at least a portion of the customers in said database and for a plurality of product groupings in said database, said historical purchase probability profile providing for each individual customer and for each individual product grouping a measure of the probability that said individual customer will purchase a product from said individual product grouping (see paragraphs 64, 71, 116);

for each customer, applying a statistical model to said purchase probability profile for the customer to determine estimated probabilities that the customer will purchase one or more products from said product groupings (see paragraph 134-135);

selecting for distribution to each customer (see paragraphs 178, 212)

the offers associated with the highest estimated probability which satisfy one or more constraints (see paragraph 175);

wherein *one or more constraints is a limitation on the quantity of promotional offers for a particular product that may be distributed in the aggregate to all customers* (see paragraph 175; "sponsors may impose a restriction on number of such offers").

As per claim 21, <u>Sridhar</u> teaches:

The method of claim 20 wherein said statistical model is an empirical Bayesian statistical model (see paragraph 135).

As per claim 22, <u>Sridhar</u> teaches:

The method of claim 20 wherein one or more of said product groupings includes one and only one product (see paragraph 191).

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sridhar et al (US 2003/0208754) in view of Deaton et al (U.S. 6,684,195).

As per claim 13, Sridhar teaches:

The method of claim 11, but fails to teach wherein said marketing strategy includes a MoveStock strategy. However, Deaton teaches a MoveStock strategy (see column 105, lines 63-67). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Sridhar would include a MoveStock marketing strategy, as taught by Deaton. It would important to Sridhar to include arbitrary grouping of products, such as hot cereals, because if a single product in the grouping of products is set up as a criteria and someone is infrequent to that criteria, a manufacturer might believe the customer is not buying hot cereals and would incorrectly target the customer with hot cereals' promotions.

As per claim 14, Sridhar teaches:

The method of claim 11, but fails to teach wherein said marketing strategy includes an UpSell strategy. However, Deaton teaches an UpSell marketing strategy (see column 90, lines 60-67; column 86). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Sridhar would include an UpSell marketing strategy, as taught by Deaton. Including this feature in Sridhar would induce customers to expend more, as the customers that expend more money would receive the better offers.

As per claim 15, Sridhar teaches:

The method of claim 11, but fails to teach wherein said marketing strategy includes a CrossSell strategy. However, Deaton teaches a CrossSell strategy (see column 106, lines 11-40; column 109, lines 25-45; column 105). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Sridhar would include a CrossSell marketing strategy, as taught by Deaton. Sridhar would use the customers' purchase history to determine the promotions' offers that would induce customers to purchase the promoted products.

As per claim 16, Sridhar teaches:

The method of claim 11, but fails to teach wherein said marketing strategy includes a Reward strategy. However, Deaton teaches a reward marketing strategy (see column 74, lines 19-27). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that Sridhar would include a Reward marketing strategy, as taught by Deaton. This feature would reward customers that purchase the promoted products.

As per claim 17, <u>Sridhar</u> teaches:

The method of claim 11, but fails to teach wherein said marketing strategy includes a BrandChange strategy. However, <u>Deaton</u> teaches a BrandChange marketing strategy (see column 103, lines 10-16). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that <u>Sridhar</u> would include a BrandChange marketing strategy, as taught by <u>Deaton</u>. This feature would target customers with incentives to change products' brands.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Sridhar</u> et al (US 2003/0208754).

As per claim 19, <u>Sridhar</u> teaches:

The method of claim 18, but fails to teach wherein said graphical display comprises a bar chart, said graphic elements comprise individual bars of said bar chart, and said movement comprises dragging said bars to lengthen and shorten them and thereby increase and decrease the associated measure of acceptance probability. However, Official Notice is taken that it is old and well known in the computer art to use software programs to create bar charts from input data and adjust said bar charts according to a user preference. It would have been obvious to a person of ordinary skill in the art at the time the application was made, to know that if <u>Sridhar</u> sorts the offers acceptance probability in order to determine the products with the largest purchase predictions, <u>Sridhar</u> would also present all the purchase prediction products in a graphic bar chart. The user would be able to adjust the graphic bar chart in the user's computer and would be able to select the products' offers based upon said adjustment.

Response to Arguments

Applicant's arguments filed 09/07/2006 have been fully considered but they are not persuasive. The 112 rejection of claim 23 has been withdrawn. The Applicant argues that Sridhar does not teach selecting offers associated with a highest score that satisfy one or more constraint and that one or more constraints is a limitation on the quantity of promotional offers for a particular product that may be distributed to all customers. The Examiner answers that Sridhar teaches a system that sponsors may impose a restriction on the number of promotional offers and where said system is required to select subscribers based on appropriate criteria[1]. Therefore, contrary to Applicant's argument, Sridhar teaches the Applicant's "constraint" limitation.

The Applicant further argues that Sridhar does not teach presenting the measures of probabilities for an individual customer in graphical display. The Examiner answers that Sridhar teaches that system administrators can configured parameters that are related to the measures of probabilities of targeting promotions[2] and also teaches a system architecture which is menu base[3]. Therefore, contrary to Applicant's argument, Sridhar teaches a system that uses graphical displays to input parameters in order to present the measures of probabilities for an individual customer.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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[1] Sridhar paragraph 175.
[2] Sridhar paragraphs 160-175
[3] Sridhar figures 1A, 7

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DANIEL LASTRA whose telephone number is 571-272-6720. The examiner can normally be reached on 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, ERIC W. STAMBER can be reached on 571-272-6724. The Examiner's Right fax number is 571-273-6720.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Daniel Lastra
November 4, 2006

RETTA YEHDEGA
PRIMARY EXAMINER